

ABSTRACT

An apparatus and method for amplifying a radiofrequency (RF) signal. The apparatus comprises a control circuit including a first transistor, a second transistor, and a ballast resistor coupled between an emitter terminal of the first transistor and a base terminal of the second transistor, such that a control voltage applied to a base terminal of the first transistor controls the amplification of a signal applied to the base terminal of the second transistor. Additional elements may be coupled to the control circuit to improve the performance thereof, including a feedback stabilization circuit, a diode stack circuit, a bypass capacitor and an additional resistor.